

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: OMMISSIONER FOR PATENTS P.D. Box 1450 Alchandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,529	10/27/2003	Krzysztof W. Przytula	HRL099	6407
28848	7590 03/08/2006		EXAM	INER
	AY & ASSOCIATES	STARKS, WILBERT L		
23852 PACIF MALIBU, C	FIC COAST HIGHWAY #31 A 90265	1	ART UNIT	PAPER NUMBER
			2129	
			DATE MAILED: 03/08/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

,			Application No.	Applicant(s)	·			
Office Action Summary			10/695,529	PRZYTULA, KRZYSZTOF W.				
			Examiner	Art Unit				
			Wilbert L. Starks, Jr.	2129				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
WHIC - Exter after - If NO - Failui Any r	CORTENED STATUTORY PERIOD FOR HEVER IS LONGER, FROM THE MASSIONS of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this commuperiod for reply is specified above, the maximum state to reply within the set or extended period for reply eply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	AILING DA of 37 CFR 1.136 unication. tutory period will vill, by statute, o	TE OF THIS COMMUNICATION (a). In no event, however, may a reply be tim I apply and will expire SIX (6) MONTHS from the application to become ABANDONEI	I. ely filed the mailing date of this communication (35 U.S.C. § 133).				
Status								
1)⊠	Responsive to communication(s) filed	d on <u>27 Oct</u>	tober 2003.					
2a) <u></u> ☐	☐ This action is FINAL . 2b) ☑ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)🛛	Claim(s) 1-66 is/are pending in the ap	oplication.		•				
•	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)[☐ Claim(s) is/are allowed. ☑ Claim(s) <u>1-66</u> is/are rejected.							
6)⊠								
7)	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restrict	ion and/or	election requirement.					
Applicati	on Papers							
9) 🗆 .	The specification is objected to by the	Examiner.						
	The drawing(s) filed on is/are:			Examiner.				
·	Applicant may not request that any object	tion to the dr	rawing(s) be held in abeyance. See	37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) 🗌	The oath or declaration is objected to	by the Exa	miner. Note the attached Office	Action or form PTO-152.				
Priority u	nder 35 U.S.C. § 119							
12) 🗌 .	Acknowledgment is made of a claim fo	or foreign p	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
a)[a) ☐ All b) ☐ Some * c) ☐ None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the Internation		, , , ,					
* See the attached detailed Office action for a list of the certified copies not received.								
Attachman	(Ic)							
Attachment	e of References Cited (PTO-892)		4) Interview Summary	(PTO-413)				
2) Notice	e of Draftsperson's Patent Drawing Review (PT		Paper No(s)/Mail Da	te				
	nation Disclosure Statement(s) (PTO-1449 or F No(s)/Mail Date	PTO/SB/08)	5) Notice of Informal Po	atent Application (PTO-152)				

Application/Control Number: 10/695,529

Art Unit: 2129

DETAILED ACTION

Claim Rejections - 35 U.S.C. §101

1. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the invention as disclosed in claims 1-66 is directed to non-statutory subject matter.

2. None of the claims is limited to practical applications in the technological arts. Examiner finds that *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 U.S.C. §101 issues on that point for reasons made clear by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir. 1999). Specifically, the Federal Circuit held that the act of:

...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicant's "decision flowchart" references are just such abstract ideas.

3. Examiner bases his position upon guidance provided by the Federal Circuit in *In* re *Warmerdam*, as interpreted by *AT&T v. Excel*. This set of precedents is within the same line of cases as the *Alappat-State Street Bank* decisions and is in complete

Art Unit: 2129

agreement with those decisions. Warmerdam is consistent with State Street's holding that:

Today we hold that the transformation of data, representing <u>discrete dollar amounts</u>, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result" -- a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades. (emphasis added) State Street Bank at 1601.

- 4. True enough, that case later eliminated the "business method exception" in order to show that business methods were not per se nonstatutory, but the court clearly *did not* go so far as to make business methods *per se statutory*. A plain reading of the excerpt above shows that the Court was *very specific* in its definition of the new *practical application*. It would have been much easier for the court to say that "business methods were per se statutory" than it was to define the practical application in the case as "...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price..."
- 5. The court was being very specific.
- 6. Additionally, the court was also careful to specify that the "useful, concrete and tangible result" it found was "a final share price momentarily fixed for recording purposes and even accepted and <u>relied upon</u> by regulatory authorities and in subsequent <u>trades</u>." (i.e. the trading activity is the <u>further practical use</u> of the real world

Art Unit: 2129

monetary data beyond the transformation in the computer – i.e., "post-processing activity".)

7. Applicant cites no such specific results to define a useful, concrete and tangible result. Neither does Applicant specify the associated practical application with the kind of specificity the Federal Circuit used.

8. Furthermore, in the case *In re Warmerdam*, the Federal Circuit held that:

...[T]he dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating 'abstract ideas' or 'natural phenomena' ... As the Supreme Court has made clear, '[a]n idea of itself is not patentable, ... taking several abstract ideas and manipulating them together adds nothing to the basic equation. In re Warmerdam 31 USPQ2d at 1759 (emphasis added).

Art Unit: 2129

- 9. Since the Federal Circuit held in *Warmerdam* that this is the "dispositive issue" when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is "useful, concrete, and tangible" in similar cases.

 Accordingly, the Examiner finds that Applicant manipulated a set of abstract "decision flowcharts" to solve purely algorithmic problems in the abstract (i.e., what *kind* of "decision" is involved? A vehicle diagnostic system? A crime predictor? Probabilistic word problems? Philosophical ideas? Even vague expressions, about which even reasonable persons could differ as to their meaning? Combinations thereof?) Clearly, a claim for manipulation of "decision flowcharts" is provably even more abstract (and thereby less limited in practical application) than pure "mathematical algorithms" which the Supreme Court has held are per se nonstatutory in fact, it *includes* the expression of nonstatutory mathematical algorithms.
- 10. Since the claims are not limited to <u>exclude</u> such abstractions, the broadest reasonable interpretation of the claim limitations <u>includes</u> such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S.C. §101 doctrine.

Art Unit: 2129

11. Since *Warmerdam* is within the *Alappat-State Street Bank* line of cases, it takes the same view of "useful, concrete, and tangible" the Federal Circuit applied in *State Street Bank*. Therefore, under *State Street Bank*, this could not be a "useful, concrete and tangible result". There is only manipulation of abstract ideas.

12. The Federal Circuit validated the use of *Warmerdam* in its more recent *AT&T*Corp. v. Excel Communications, Inc. decision. The Court reminded us that:

Finally, the decision in In re Warmerdam, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) is not to the contrary. *** The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that 'taking several abstract ideas and manipulating them together adds nothing to the basic equation'; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court's conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §101. (emphasis added) AT&T Corp. v. Excel Communications, Inc., 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

- 13. Remember that in *In re Warmerdam*, the Court said that this was the dispositive issue to be considered. In the *AT&T* decision cited above, the Court reaffirms that this is the issue for assessing the "useful, concrete, and tangible" nature of a set of claims under 101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.
- 14. The fact that the invention is merely the manipulation of *abstract ideas* is clear. The data referred to by Applicant's phrase "decision flowchart" is simply an abstract construct that does not provide <u>limitations</u> in the claims to the transformation of real world data (such as monetary data or heart rhythm data) by some disclosed process. Consequently, the necessary conclusion under *AT&T*, *State Street* and *Warmerdam*, is

Application/Control Number: 10/695,529

Art Unit: 2129

straightforward and clear. The claims take several abstract ideas (i.e., "decision flowcharts" in the abstract) and manipulate them together adding nothing to the basic equation. Claims 1-66 are, thereby, rejected under 35 U.S.C. §101.

Claim Rejections - 35 U.S.C. §112

The following is a quotation of the first paragraph of 35 U.S.C. §112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-66 are rejected under 35 U.S.C. §112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a §101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed *how* to practice the *undisclosed* practical application. This is how the MPEP puts it:

("The how to use prong of section 112 incorporates as a matter of law the requirement of 35 U.S.C. §101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. §101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. §112."); In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, otherwise an applicant would anomalously be required to teach how to use a useless invention.") See, MPEP 2107.01(IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-66 are rejected on this basis.

Further, independent claims 1, 23, and 45 are not fully enabled to operate as Applicant claims. for instance, the claims recite that conditional probabilities are

Application/Control Number: 10/695,529

Art Unit: 2129

determined for all test states by "examining dependencies of conclusion links on the outcome nodes in the decision flowchart." Applicant has not disclosed from where these probabilities actually come. More specifically, Applicant has not disclosed any limitations to a practical application, so no one of ordinary skill in the art can look at a network that has not been applied to anything and pull the probabilities out of thin air.

No one can simply "examine" the dependencies of an abstract concept and know probabilities that are appropriate...a limitation to a practical application must be disclosed.

Further, Applicant does not specify the central conversion process that takes one from a decision flowchart to a causality graph. Applicant merely defines the decision flowchart in terms of the results of the conversion process. No one of ordinary skill in the art would imply a specific conversion method from this.

Further, claims 2, 24, and 46 disclose the use of a "Flowchart Markup Language (FCML)." No such language is known to the art. There are no other references to such a thing on the Internet through Google. There is no definition of the parameters of such a language in the Specification. The so-called "FCML" is merely an abstract idea with no definition.

Accordingly, no one of ordinary skill in the art would know how to practice this part of the invention, since it is completely unknown to the art.

For all these reasons, claims 1-66 fail 35 U.S.C. §112, first paragraph and are, thereby rejected.

Art Unit: 2129

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Specifically,

- A. Penaloza, R, Improvements on KAMET-to-Bayesian-Network Transformations, Instituto Tecnologico Autonomo de Mexico (ITAM), Department of Computer Science, 2003, pp. 1-10.
- B. Cairo, O, Using Bayesian Networks as an Inference Engine in KAMET, Proceedings of the XXIII International Conference of the Chilean Computer Science Society (SCCC'03), 2003, pp. 1-7.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

Art Unit - 2121

Alternatively, inquiries may be directed to the following:

S. P. E. David Vincent (571) 272-3080

(571) 273-8300 Official (FAX) Wilbert L. Starks, Jr.

WLS

05 March 2006